# LOS ANGELES COUNTY FISH AND GAME COMMISSION GRANT APPLICATION TITLE PAGE

TITLE OF PROJECT/PROGRAM Malibu Creek Data sonde replacement			
NAME OF ORGANIZATION RCD of the Santa Monica Mountains [As it appears on (501) (c) (3) IRS Letter]			
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CITY <u>Topanga</u>	STATE_CA_	ZIF	CODE 90290
TELEPHONE NUMBER_	818.597.8627	_FAX NUMBER_	818.597.8630
AMOUNT REQUESTED \$5979			
BOARD CHAIRPERSON Richard Brody			
EXECUTIVE DIRECTOR Clark Stevens			
CONTACT PERSON Rosi Dagit			
TITLE Senior Conservation Biologist			
TELEPHONE NUMBER(S) 310.455.7528			
AUDITED TOTAL INCOME 1228903 AUDITED TOTAL EXPENSES 1126974			
FOR) FISGAL XEAR BEG	NNING 2013	AND ENDING	G 2014
hall (			3.19.15
SIGNATURE OF BOARD	CHAIRPERSON		DATE

Note to Applicant: Please complete this title page and attach all grant application materials prior to submission.

## One Page Project Summary

The RCDSMM has been maintaining a continuously recording data sonde in Malibu Creek using equipment donated for the project from the National Park Service Mediterranean Learning Center and California State University Channel Islands since 2011. These sondes provide critical water temperature and dissolved oxygen data needed to support the continued survival of endangered southern steelhead trout. Since 2013, the drought condition has required introduction of supplemental flows, and the temperature and dissolved oxygen data has been crucial to helping monitor the effectiveness of this effort.

In 2012, the Commission provided important funding to cover the replacement of the dissolved oxygen probe and some calibration solutions. In January 2013 the NPS sonde was stolen and then replaced. We have been moving the new dissolved oxygen sensor back and forth between the 2 sondes as they are swapped out for monthly maintenance. We have had several problems due to the need to share the sensor between the 2 sondes, resulting in several months of lost data this summer. The pH sensor also failed. The CSUCI sonde is quite old and has been repaired several times. These tools have a limited lifespan and we are reaching the end for that sonde.

Our request is to obtain a new Troll 9500 sonde to replace the CSUCI equipment, and to outfit it with new sensors that will be more reliable and not need to be shared between sondes. Additionally, we need to replace the pH sensor on the NPS sonde and the calibration solutions and maintenance kits in order to keep the sensors functioning smoothly.

Despite being listed as a Core Recovery area in the Southern California Steelhead Recovery Plan (NMFS 2012), funding for work in Malibu Creek has been severely limited. The contributions of the Commission to continued monitoring really help. We have reached out to the fly fishing community, who contributed \$1,000 to help replace wetsuits, as well as others for support of this effort, but to date have not found any other financial contributors. RCDSMM staff and volunteers are not funded to maintain the equipment but do so in order to ensure that the data needed to make management decisions (moving fish, removal of Rindge Dam, etc.) progresses.

## Background on Applicant's Organization

Purpose and goals:

The RCDSMM has provided important resource management information to our constituents since 1961. We have a long history of research, education, outreach and implementation of watershed planning and restoration within the Santa Monica Mountains.

# Brief summary of current activities:

The RCDSMM staff and Stream Team volunteers currently conduct monthly water quality monitoring (DO, conductivity, temperature, pH, pressure) and maintenance of the data sonde and HOBO temperature loggers in Malibu Creek. Additionally, our data is provided to local managers to assist in monitoring effectiveness of augmented stream flows and document conditions prior to the proposed removal of Rindge Dam.

#### Geographic area served:

The boundaries of the RCDSMM extend from Encino to Thousand Oaks, from the Chatsworth Reservoir south to the ocean, and Catalina Island. The focus of this effort will be critical habitat for the southern steelhead trout designated in Malibu Creek downstream of Rindge Dam.

Major sources and dollar amounts of corporate, foundation and government support during current and past fiscal year:

Funding for our southern steelhead trout monitoring efforts in Malibu, Topanga, and Arroyo Sequit Creeks has been provided by the CDFW Fisheries Restoration Grant Program. Our current grant funding continues until March 2017, and the total award was \$197,015.00. Unfortunately, the grant does not cover the costs associated with repairing or maintaining the sondes. It does cover the personnel costs by coordinating maintenance and calibration activities with monthly snorkel surveys.

History of all grants received from the Los Angeles County Fish and Game Commission:

Underwater Ultrasound DIDSON camera, 2013: \$2000 Restoration Tools, September 2013: \$1685 Malibu Creek Data Sonde Replacement, August 2014: \$5431

#### **Project Information**

Statement of justification of need:

Neither NPS nor CSUCI are able to provide further funding to replace the data sondes they donated to this effort in 2011. While we can continue to provide the volunteers to do the maintenance, we need help with keeping at least one fully functioning sonde continuously recording data in the field, which requires routine maintenance and calibration, replacement and repair of old parts. Currently both sondes are several years old and outside of their warranty period. Last year In-Situ generously waived repair costs in light of the severe drought and importance of the data, but we would not expect them to repeat that gesture this year. Replacing malfunctioning equipment with new equipment will ensure long use in the field.

#### Statement of purpose and goals:

Monitoring water temperature and dissolved oxygen, especially under the current drought conditions is critical to supporting the survival of steelhead trout in Malibu Creek. This equipment has provided important data to assist in accomplishing the best management possible.

### Action plan to meet objectives:

With a replacement sonde and probes, we will be able to more effectively provide continuous data on water temperatures and dissolved oxygen. This data is used to help determine amount and timing of flow augmentation into the creek that will allow refugia pools to remain suitable for trout. These sondes are deployed year round and provide the only continuous data in the reach with trout. At a minimum, the ability to collect continuous data requires one fully functional multi-parameter sonde as well as a back-up sonde with the full complement of sensors.

Statement of how the objectives advance the propagation and protection of fish and wildlife:

Drought stress is a real problem at the moment. Monitoring temperature and dissolved oxygen are important tools to help guide management of augmentation flows and provide important information on effectiveness - is there sufficient water to keep pools cool enough to support the trout? These data sondes are the only continuously logging equipment deployed in Malibu Creek and the data is really critical to our understanding of conditions in the creek.

# Project budget and timetable:

All equipment will be purchased once funds are available for immediate use. QuickCal Solution for pH and conductivity (3 x \$69): \$207 RDO sensor cap replacement kit (\$137) + Calibration solution(\$39): \$176 pH Sensor Reference Junction Kit: (\$116) + storage solution (\$28):\$144 pH replacement sensor: \$499

Data sonde: Troll 9500 Multiparameter probe: \$4313

Shipping cost for supplies/repairs: \$80

12% Tax on shipping and purchases/repairs: \$560

TOTAL: \$5979

Sources of other support for project:

At this time we have no other sources of funding for this equipment. Requests are pending from CalTrout and some local flyfishing clubs, but no response to date.

Current status of project:

We continue to limp along with one barely functional sonde, made possible by swapping out parts from each of them, extensive troubleshooting, and the generosity of the company that makes them to waive some repair costs. Swapping out sondes and parts meant that we lost our back-up, and also introduces the danger of water damage. While our monthly fish surveys have been continuous, sadly the coinciding sonde data has several data gaps (from weeks to months) for conductivity, dissolved oxygen, and pH. To date the non-functioning sonde equipment has been sitting in our lab for more than 6 months awaiting either repair or replacement. Since repair costs are almost the same as replacement costs, we really hope to replace the equipment, which has the advantage of a new warranty.

Cash flow analysis of the expenditure of project funds:

Upon receipt of the funds we will purchase all equipment, perform the required routine maintenance, and keep the project going.

Proposed method of evaluating results:

We will provide current condition data to Las Virgenes Municipal Water District (to help guide flow augmentation) and CDFW to help guide fish protection efforts.

Plans for funding on-going project (if applicable):

We recently were awarded another grant from CDFW in June 2015 that will assist us with covering personnel costs, and limited maintenance of sonde equipment. We had asked NPS to incorporate some funds for future repairs and calibration solutions into their budget, but since this was not forthcoming this year, we do not expect it to be forthcoming for 2015 either.

Progress reports (bi-yearly or upon completion, whichever occurs first):

We will provide a report upon completion of the purchase and installation of the sondes.

Please Attach the Following Supporting Documents:

- Description of Organizational Structure or Organizational Chart
- Copy of the Latest IRS Determination Letter of Tax Exempt Status under Section 501(c) (3)
- Most Recent Audited Financial Statement
- Most Recent IRS Form 990